

EPA REGION-10 CONTRACT FOR INTERIOR REMODELING

HVAC— PROCUREMENT LANGUAGE

PRODUCT-SPECIFIC LANGUAGE

DIVISION 15 - MECHANICAL

HEATING, VENTILATING, AND AIR CONDITIONING

15500

GENERAL

ALL MECHANICAL WORK TO BE PERFORMED AS DESIGN/BID/BUILD BY McDONALD MILLER.

INSTALLATION

DURING CONSTRUCTION THE AIR HANDLER SYSTEMS AND TERMINAL DEVICES SERVING THE TENANT SHALL BE TURNED OFF. REMOVE TWO SPANDREL PANELS PER PHASE AREA DURING CONSTRUCTION, AND PROVIDE TEMPORARY EXHAUST FANS THAT WILL MAINTAIN NEGATIVE PRESSURE IN THE CONSTRUCTION ZONE. SEAL AIR PATHS TO ADJACENT NON-CONSTRUCTION ZONES.

BALANCING AND TESTING

SET BALANCING AND TESTING STANDARDS SUBSEQUENT TO EQUIPMENT SELECTION AND PLACEMENT. PROVIDE FOR EQUAL DISTRIBUTION OF SUPPLY AIR TO OFFICES, MAINTAINING POSITIVE PRESSURE AT ALL TIMES.

HVAC SEALANT

ANY HVAC SEALANT MUST BE LOW-ODOR, ALL WEATHER, WATERPROOF, VAPOR PROOF COATING. ADDITIONALLY, IT MUST BE NON-TOXIC AND NON-CARCINOGENIC. ALL SEALANTS EMPLOYED ON THE PROJECT ARE TO BE THOSE WITH THE LOWEST POSSIBLE VOLATILE ORGANIC COMPOUND "VOC" CONTENT (BELOW 20G/L), AND WHICH MEET REQUIREMENTS OF THE MANUFACTURER OF THE PRODUCTS INVOLVED OR ADHERED.

ACCEPTABLE PRODUCTS

- 1. SAFECOAT DYNOSEAL BY AMERICAN FORMULATING AND MANUFACTURING, 350 WEST ASH STREET, SUITE 700, SAN DIEGO, CA 92101, (619)239-0321.**

PERFORMANCE REQUIREMENTS

- 1. PRODUCT MUST NOT CONTAIN FORMALDEHYDE, AQUEOUS AMMONIA, CRYSTALLINE SILICA, OR ETHYLENE GLYCOL.**
- 2. TOTAL VOC BELOW 20 G/L OR LESS.**

CONTROLS

15950

GENERAL

THERMOSTATS REQUIRED AT MOVEABLE WALLS TO BE LOCATED AND PROVIDED BY CONTRACTOR AND TO BE INSTALLED BY OTHERS.

PRIOR TO INSTALLATION CONTRACTOR TO SUBMIT A PLAN FOR THERMOSTAT PLACEMENT TO EPA AND BUILDING MANAGEMENT'S FOR REVIEW AND APPROVAL.

01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

HVAC

THE RETURN SIDE OF THE VAV SYSTEM SHALL BE TURNED OFF DURING THE CONSTRUCTION PERIOD, AND TEMPORARY FAN POWERED EXHAUST SHALL BE PROVIDED. OUTSIDE AIR SETTINGS FOR THE AIR HANDLER SHALL BE 100% OUTSIDE AIR.

EXHAUST AIR SHALL BE EXTRACTED FROM THE SPACE BY REMOVING 2 SPANDREL PANELS AT EACH CORNER OF THE CONSTRUCTION AREA, AND CONSTRUCTION OF AN AIR PLENUM THAT VENTS TO THE OUTSIDE. CONTAMINATION OF OTHER SPACES ON THE FLOOR SHALL BE PREVENTED WITH A PLASTIC MEMBRANE, SEALING DOORS AND OTHER OPENINGS WITH DUCT TAPE AT HEAD, JAMB, AND SILL.

CONTRACTOR TO INSTALL TEMPORARY CONSTRUCTION FILTERS IN AIR HANDLER DURING THE CONSTRUCTION PERIOD. FILTERS ARE TO BE REPLACED AFTER COMPLETION OF THE FLUSH OUT PERIOD.

USE WINDOW EXHAUST SYSTEMS TO ESTABLISH NEGATIVE PRESSURE IN CONTAMINANT-PRODUCING WORK AREA, ENSURING CONTINUOUS FLOW OF AIR INTO WORK AREA. SEAL EXHAUST SYSTEM DUCTWORK THAT MIGHT LEAK INTO BUILDING OR MECHANICAL SYSTEMS.

PERFORMANCE CRITERIA

PROVIDE TEMPORARY CONSTRUCTION FILTERS

EXHAUST AIR TO BE EXTRACTED AT A RATE SUFFICIENT TO PRODUCE CONTINUOUS NEGATIVE PRESSURE IN THE WORK AREA.

DIVISION 2 - DEMOLITION

GENERAL

WASTE MANAGEMENT PLAN MUST BE APPROVED PRIOR TO BEGINNING DEMOLITION.

EXECUTION

3. SEPARATE CARPET, WOOD WASTE, DRYWALL, EXCESS METALS AND OTHER MATERIALS AS APPROPRIATE FOR RECYCLING IN ACCORDANCE WITH THE WASTE MANAGEMENT PLAN AND PLACE IN DESIGNATED AREAS AND/OR CONTAINERS FOR RECYCLING.
4. CAREFULLY REMOVE AND SALVAGE OR STORE AND REUSE PLUMBING, MECHANICAL AND ELECTRICAL FIXTURES AND ALL DOORS AND RELITES PER THE CONTRACT DRAWINGS AND SPECIFICATIONS

DOCUMENT 00200 - WASTE MANAGEMENT/POLLUTION PREVENTION PLAN

TARGET BUILDING MATERIALS

THE HANDLING OF THE FOLLOWING ITEMS SHOULD BE ADDRESSED IN THE PLAN.

METALS

10. STEEL STUDS

11. WIRING AND ELECTRICAL EQUIPMENT

- 12. **HARDWARE**
- 13. **DUCT WORK AND HVAC EQUIPMENT**

MISCELLANEOUS MATERIALS

- 14. **INSULATION**
- 15. **WOOD**
- 16. **CARDBOARD**
- 4. **PACKAGING**

FIXTURES

- 21. **ALL FIXTURES NOT REUSED ON SITE SHOULD BE REMOVED CAREFULLY DURING DEMOLITION AND SALVAGED BY THE CONTRACTOR OR DELIVERED TO EARTHWISE (206-624-4510). FOR RESALE.**

OTHER APPLICABLE CONTRACT LANGUAGE

DIVISION 1 - GENERAL REQUIREMENTS

SUMMARY OF THE WORK

01010

WORK COVERED BY THE CONTRACT INCLUDES DEMOLITION OF EXISTING PARTITIONS, CARPETING, AND LIGHTING SYSTEMS; INSTALLATION OF NEW CARPETING, PARTITIONS, WALLBOARD, DOORS AND MILLWORK, FINISHES, PLUMBING FIXTURES, LIGHTING FIXTURES AND CONTROLS AND WIRING FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY (TENANT) PARK PLACE BUILDING, 1200 SIXTH AVE., SEATTLE

SPECIAL CONDITIONS ARISE FROM THE ENVIRONMENTAL FOCUS OF THE PROJECT. FOR THE PURPOSES OF THIS PROJECT, "ENVIRONMENTALLY SUSTAINABLE" MEANS REDUCING, REUSING AND RECYCLING CONSTRUCTION, DEMOLITION AND WORKER WASTE, AND THE SELECTION AND INSTALLATION OF ENVIRONMENTALLY PREFERABLE BUILDING PRODUCTS AND MATERIALS.

ENVIRONMENTALLY PREFERABLE PRODUCTS AND MATERIALS ARE THOSE WHICH MINIMIZE THE CONTENT OF TOXIC OR HARMFUL SUBSTANCES; RELEASE MINIMAL AMOUNTS OF VOLATILE ORGANIC COMPOUNDS (VOCs) OR CFCs INTO THE ENVIRONMENT; CONTAIN SIGNIFICANT AMOUNTS OF POST-CONSUMER RECYCLED MATERIALS; ARE RECYCLABLE; ARE PRODUCED TRANSPORTED AND INSTALLED IN AN ENERGY EFFICIENT MANNER; AND DO NOT IMPACT RARE OR ENDANGERED NATURAL RESOURCES.

SPECIAL PROJECT PROCEDURES

01100

PRODUCT CURING

ALL DRY FURNISHINGS AND MATERIALS (SUCH AS CARPET, FLOOR TILE, ACOUSTICAL TILE, TEXTILES, WOOD SHELVING, AND FURNISHINGS, ETC.) SHALL BE ALLOWED TO VENT OR CURE FOR 48 HOURS PRIOR TO BEING BROUGHT ON SITE.

VENTING SHALL BE CONDUCTED BY REMOVING ALL PACKAGING MATERIALS, ALLOWING FUMES AND ODORS TO VENT TO THE ATMOSPHERE FOR 48 HOURS, WHILE PROTECTING THE MATERIALS FROM DAMAGE OR DEGRADATION PRIOR TO INSTALLATION. WORK SEQUENCING

THE WORK SHALL BE ARRANGED TO AVOID CONTAMINATION OF BUILDING MATERIALS AND SYSTEMS

BY CONSTRUCTION DEBRIS AND DUST. "DRY" FURNISHINGS AND MATERIALS SHALL NOT BE INSTALLED UNTIL "WET" MATERIALS HAVE BEEN APPLIED AND ALLOWED TO DRY TO THE EXTENT FEASIBLE AND IN ACCORDANCE WITH OTHER GOOD BUILDING PRACTICES. THE CONTRACTOR IS TO COMPLY WITH ANY RECOMMENDED MEASURES IN THE MSDS TO PROTECT THE HEALTH AND SAFETY OF PERSONNEL.

SPACE FLUSH-OUT

A FLUSH OUT PERIOD OF 7 DAYS AT AMBIENT TEMPERATURES WITH 100% OUTSIDE AIR VENTILATION PRIOR TO OCCUPANCY, AS APPROVED BY THE TENANT. ALL TOXIN EMITTING MATERIALS, EXCEPT FURNISHINGS, SHALL BE IN PLACE, UNPACKED, PRIOR TO COMMENCEMENT OF THE FLUSH-OUT PERIOD.

01505

WASTE MANAGEMENT

GENERAL

THE TENANT HAS ESTABLISHED THAT THIS PROJECT SHALL GENERATE THE LEAST AMOUNT OF WASTE POSSIBLE AND THAT PROCESSES SHALL BE EMPLOYED THAT ENSURE THE GENERATION OF AS LITTLE WASTE AS POSSIBLE DUE TO ERROR, POOR PLANNING, BREAKAGE, MISHANDLING, CONTAMINATION OR OTHER FACTORS.

WASTE DISPOSAL IN LANDFILLS SHALL BE MINIMIZED, AND AS MANY OF THE WASTE MATERIALS AS ECONOMICALLY FEASIBLE SHALL BE REUSED, SALVAGED OR RECYCLED.

DOCUMENT 00200 - WASTE MANAGEMENT/POLLUTION PREVENTION PLAN

GENERAL

THE CONTRACTOR SHALL DEVELOP WASTE MANAGEMENT PLAN BASED ON THE GOALS DISCUSSED BELOW, AND SUBMIT THE PLAN FOR REVIEW AND APPROVAL BY THE OWNER AND TENANT AFTER AWARD OF CONTRACT AND BEFORE BEGINNING DEMOLITION. ONCE APPROVED, THE PLAN WILL BE INCLUDED IN THE CONTRACT DOCUMENTS.

WASTE MANAGEMENT GOALS

THIS PROJECT REQUIRES A PRO-ACTIVE EFFORT TO REDUCE AND RECYCLE DEMOLITION AND CONSTRUCTION WASTE. A DILIGENT EFFORT SHOULD BE MADE TO ACHIEVE THE GOALS DESCRIBED BELOW WHEREVER APPLICABLE IN ORDER TO REDUCE WASTE AND OVERALL DISPOSAL COSTS AND LIMIT THE ENVIRONMENTAL IMPACT OF THE PROJECT.

WASTE PREVENTION

TO THE GREATEST EXTENT PRACTICAL, THIS PROJECT SHALL GENERATE THE LEAST AMOUNT OF WASTE POSSIBLE, USING PROCESSES THAT ENSURE THE GENERATION OF AS LITTLE WASTE AS POSSIBLE DUE TO ERROR, POOR PLANNING, BREAKAGE, MISHANDLING, CONTAMINATION OR OTHER FACTORS. THE CONTRACTOR IS ENCOURAGED TO SEEK ADDITIONAL METHODS TO PREVENT WASTE IN THE FIRST PLACE. FOR EXAMPLE, CHOOSING SUPPLIERS THAT LIMIT PACKAGING, SETTING UP CENTRALIZED CUTTING AREAS TO REDUCE WOOD AND DRYWALL WASTE, AND ACCURATE ORDERING OF SUPPLIES TO AVOID OVERAGE.

REUSE AND RECYCLING

DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT ACTIVITIES SHOULD ACHIEVE A MINIMUM 50% DIVERSION RATE. THE PREFERRED METHOD OF RECYCLING IS ON-SITE SEPARATION OF RECYCLABLE MATERIALS WHICH GENERALLY RESULTS IN LESS CONTAMINATION AND HIGHER RECYCLING RATES THAN COMMINGLED COLLECTION.

MATERIALS REMOVED FROM THE EXISTING STRUCTURES SHALL BE DISPOSED OF BASED ON THE FOLLOWING HIERARCHY, FROM THE MOST TO THE LEAST DESIRABLE.

SALVAGED AND REUSED ON SITE.

- 1. SALVAGED AND DONATED OR SOLD FOR REUSE OFF SITE.**
- 2. SOURCE SEPARATED ON SITE AND RECYCLED.**
- 3. CO-MINGLED AND SORTED FOR RECYCLING BY A RECYCLING HAULER OR FACILITY.**
- 4. ALL NON-USABLE OR NON-RECYCLABLE MATERIALS ARE TO BE DISPOSED OF AS WASTE IN THE MOST ENVIRONMENTALLY SENSITIVE MANNER AS PRACTICABLE.**

CLOSE-OUT

AT JOB CLOSE-OUT, THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL BE REQUIRED TO QUANTIFY AND SUBMIT IN WRITING THE ULTIMATE DISPOSITION OF ALL DEMOLITION AND CONSTRUCTION MATERIALS. THE SUBMITTALS SHOULD INCLUDE THE FOLLOWING INFORMATION:

- 27. DESCRIPTION OF MATERIAL, TYPE AND QUANTITY.**
- 28. DISPOSAL METHOD.**
- 29. COST OR BENEFIT.**
- 30. TOTAL DIVERSION PERCENTAGE.**
- 31. DESCRIPTION OF MATERIALS NOT REUSED OR RECYCLED AND A BRIEF EXPLANATION AS TO WHY IT WAS NOT FEASIBLE TO REUSE OR RECYCLE.**

